

REMARKS/ARGUMENTS

The Office Action mailed April 8, 2005 has been reviewed and carefully considered. Claim 4 is canceled. Claims 1, 5 and 14 are amended. Claim 21 is added. Claims 1-3 and 5-21 are pending in this application, with claims 1 and 14 being the only independent claims. Reconsideration of the above-identified application in view of the amendments and the following remarks is respectfully requested.

Claims 1-20 stand rejected under 35 U.S.C. §103 as unpatentable over U.S. Patent No. 6,681,099 (Keranen) in view of U.S. Patent No. 6,477,380 (Uehara).

Before discussing the cited prior art and the Examiner's rejections of the claims in view of that art, a brief summary of the present invention is appropriate. The present invention relates to a network based system and method for determining a location of a User Equipment (UE) in CDMA networks. According to the present invention, a request is made for determining UE location (page 6, lines 8-10). In response, a Radio Network (RNC) determines a value of the transmission timing difference of the UE (page 6, line 14-16). A Round Trip Time (RTT) is then measured for connected transceiver node in active communication with the UE (page 6, lines 14-16). After that, the RTT is determined for at least one other transceiver which is not in active communication with the UE (page 6, lines 16-17 and page 11, line 19 to page 12, line 3). When the distance of the UE from the connected node and at least two other node is determined, the positions of all three nodes are known and the position of the UE may be determined, for example by calculating the intersection of circles around the three known locations, where the radii of the circles are the distance from the respective transceiver nodes (page 12, lines 3-7). If no transceiver node is connected to the UE when a location request is made, the RNC requests a channel set up. In this embodiment, the UE is required to start signaling in a random access channel (page 14, lines 16-21).

Independent claim 1 is amended to include the recitations of original dependent claim 4 and now recites "determining if the user equipment is in active communication with a connected transceiver node in response to said request for locating a user equipment, requesting a connection between the user equipment and a selected transceiver node if the user equipment is not in active communication with any transceiver node, and connecting the selected transceiver node with the user equipment so that the selected transceiver node comprises a connected transceiver node."

The Examiner stated in his rejection that the limitations of claim 4 are taught by Keranen. However, independent claim 1 now clarifies that the steps of requesting a connection and connecting the selected transceiver node are performed "in response to a request for locating a user equipment". Keranen fails to teach or suggest this limitation. The Examiner refers to col. 4, lines 9-15 of Keranen as teaching the limitations of original dependent claim 4. However, the section of Keranen referred to by the Examiner discloses only situations in which a UE Rx-Tx timing difference can be different than a nominal value. Since Keranen does not address steps to be taken if there is no transceiver in active communication with the UE, Keranen fails to teach or suggest "determining if the user equipment is in active communication with a connected transceiver node in response to said request for locating a user equipment, requesting a connection between the user equipment and a selected transceiver node if the user equipment is not in active communication with any transceiver node", as expressly recited in independent claim 1.

Uehara fails to teach or suggest that which Keranen lacks. Uehara discloses a system and method for estimating a location of a mobile station. However, Uehara fails to each the requirement that one of the base stations used for the measurement has to be in active

communication with the UE. Rather, Uehara discloses that a position manage center (PMC) notifies the selected base stations that the UE will radiate radio waves and orders the base stations to report on the receipt thereof (see col. 6, lines 1-21, of Uehara). Since Uehara fails to require that any of the base stations are in active communication with the UE, Uehara fails to teach or suggest "determining if the user equipment is in active communication with a connected transceiver node in response to said request for locating a user equipment, requesting a connection between the user equipment and a selected transceiver node if the user equipment is not in active communication with any transceiver node, and connecting the selected transceiver node with the user equipment so that the selected transceiver node comprises a connected transceiver node", as expressly recited in independent claim 1. In view of the above amendments and remarks, it is respectfully submitted that independent claim 1 is allowable over Keranen in view of Uehara.

Independent claim 14 is amended to include similar limitations to claim 1 and should be allowable for the same reasons.

Dependent claims 2-3, 5-13, and 15-21, each being dependent on one of independent claims 1 and 14, are deemed to be allowable for at least the same reasons expressed above with respect to independent claims 1 and 14, as well as for the additional recitations contained therein.

Dependent claims 5 and 21 additionally recite "requesting, by the selected transceiver node, a return trip time measurement via a random access channel to connect the user equipment to the selected transceiver node in response to the request for locating a user equipment". The Examiner states that Keranen discloses the limitations of claim 5 because RACH is commonly used when a mobile attempts to access a system. Dependent claim 5 has

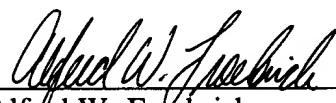
been amended to more specifically recite that the return trip measurement via random access channel is requested in response to a request for a location of a user equipment. New claim 21 includes similar limitations. The prior art fails to disclose "requesting, by the selected transceiver node, a return trip time measurement via a random access channel to connect the user equipment to the selected transceiver node in response to the request for locating a user equipment", as recited in dependent claims 5 and 21. Accordingly, dependent claims 5 and 21 are allowable over Keranen and Uehara for these additional reasons.

The application is now deemed to be in condition for allowance and notice to that effect is solicited.

Respectfully submitted,

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